REMARKS

By this Amendment, claim 30 has been amended merely to further recite the claimed subject matter, claim 31 has been cancelled and new claim 37 has been added merely to provide further dependent claim support to claim 30. Applicants have amended the currently pending claims in order to expedite prosecution and do not, by this amendment, intend to abandon subject matter of the claims as originally filed or later presented. Moreover, Applicants reserve the right to pursue such subject matter in a continuing application. No new matter has been added. Claims 1, 3-13, 15-25, 27-30 and 32-37 are pending in this patent application. Reconsideration of the rejections in view of the remarks below is requested.

Entry of the Amendment is proper under 37 C.F.R. §1.116 as the amendments: (a) place the application in condition for allowance for the reasons discussed herein; (b) do not present any new issues that would require further consideration and/or search as the amendments merely amplify issues discussed throughout the prosecution; (c) do not present any additional claims without canceling a corresponding number of claims; (d) place the application in better form for appeal, should an appeal be necessary; and (e) were not made earlier because they are made in response to the points first presented in the final Office Action. Entry of the Amendment is thus respectfully requested along with withdrawal of the final Office Action.

Claim 27 was rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. In particular, the Examiner argues that if the inlet port is connected to the projection frame, it is not understood how the inlet port can be mechanically isolated from the projection system as recited in claim 21 from which claim 27 depends. Respectfully, Applicants submit that the inlet port may be mechanically isolated from the projection system even if connected to the projection system frame and thus claim 27 is not indefinite. Any number of methods and mechanisms well-known in the art may be used to isolate the projection system from disturbances imparted on or generated by the inlet port even where the inlet port is connected to the projection system frame that supports the projection system. For example, a damper may be interposed between the inlet port and the projection system or a force compensator could be used. Accordingly, reconsideration and withdrawal of the objection to claim 25 are respectfully requested.

The Office Action rejected claims 21-22, 24, 30-31 and 33 under 35 U.S.C. §102(e) as anticipated by U.S. Patent Application Publication No. US 2005/0264774 to Mizutani et al. ("Mizutani et al."). Applicants respectfully traverse the rejection, without prejudice.

The Examiner submits that Mizutani et al. discloses "at least one immersion liquid inlet port (4) not provided on the substrate table and wherein at least one immersion liquid outlet port (4) [sic] is 'suspended above' the substrate and is radially outward of the at least one immersion liquid inlet port (see figure 1), and the inlet port is mechanically isolated from the projection optical system..." Respectfully, Applicants submit that there is no indication in Mizutani et al. that the liquid supply nozzle 4 is mechanically isolated from the projection optical system PL. Mizutani et al. is silent as to how the supply nozzle 4 is connected to the lithography apparatus. Clearly, the supply nozzle 4 cannot be merely suspended in air – it must be connected to something. Mizutani et al. fails to identify this connection and Applicants submit that supply nozzle 4 may be connected to the projection optical system (or its frame) such that the inlet port is not mechanically isolated from the projection optical system. Accordingly, Applicants respectfully submit that Mizutani et al. fail to disclose, teach or suggest a lithographic apparatus comprising, *inter alia*, a liquid supply system comprising at least one immersion liquid inlet port provided on a boundary of the space, not provided on the substrate table, and mechanically isolated from the projection system as recited in independent claim 21.

Further, Mizutani et al. do not disclose a liquid outlet port radially outward of the liquid inlet port. In Figures 1-3 of Mizutani et al., the liquid recovery nozzle 5 appears at the substantially same radial position as the liquid supply nozzle 4 and thus does not clearly show that the liquid outlet port is radially outward of the liquid inlet port. Accordingly, Applicants submit that Mizutani et al. fail to disclose, teach or suggest a lithographic apparatus comprising, *inter alia*, a liquid supply system comprising at least one immersion liquid inlet port not provided on the substrate table, wherein an at least one immersion liquid outlet port is provided only on the substrate table, or suspended above the substrate table, or both, wherein the at least one immersion liquid outlet port is radially outwardly, relative to an optical axis of the projection system, of the at least one immersion liquid inlet port as recited in independent claim 30.

Therefore, for at least the above reasons, Mizutani et al. fails to disclose, teach or suggest all the features recited by claims 21 and 30. Claim 31 has been cancelled and thus its rejection is now moot. Claims 22 and 24 depend from claim 21 and claims 33 and 37 depend

from claim 30 and are, therefore, patentable for at least the same reasons provided above related to respectively claims 21 and 30 and for the additional features recited therein. As a result, Applicants respectfully submit that the rejection under 35 U.S.C. §102(e) of claims 21-22, 24, 30-31 and 33 in view of Mizutani et al. should be withdrawn and the claims allowed.

The Office Action rejected claims 30-31, 33 and 34 under 35 U.S.C. §102(e) as anticipated by U.S. Patent No. 6,867,844 to Vogel et al. ("Vogel et al."). Applicants respectfully traverse the rejection, without prejudice.

Vogel et al. do not disclose a liquid outlet port radially outward of the liquid inlet port. In Figures 1-5 of Vogel et al., the liquid channel shown to remove liquid appears at the substantially same radial position as the channel to supply liquid and thus does not clearly show that the liquid outlet port is radially outward of the liquid inlet port. Accordingly, Applicants submit that Vogel et al. fail to disclose, teach or suggest a lithographic apparatus comprising, *inter alia*, a liquid supply system comprising at least one immersion liquid inlet port not provided on the substrate table, wherein an at least one immersion liquid outlet port is provided only on the substrate table, or suspended above the substrate table, or both, wherein the at least one immersion liquid outlet port is radially outwardly, relative to an optical axis of the projection system, of the at least one immersion liquid inlet port as recited in independent claim 30.

Therefore, for at least the above reasons, Vogel et al. fail to disclose, teach or suggest all the features recited by independent claim 30. Claim 31 has been cancelled so its rejection is now moot. Claims 33, 34 and 37 depend from claim 30 and are, therefore, patentable for at least the same reasons provided above related to claim 30 and for the additional features recited therein. As a result, Applicants respectfully submit that the rejection under 35 U.S.C. §102(e) of claims 30-31, 33 and 34 in view of Vogel et al. should be withdrawn and the claims allowed.

The Office Action rejected claims 25, 28-29, 32 and 35-36 under 35 U.S.C. §103 as being obvious in view of Mizutani et al. and apparently further in view of U.S. Patent No. 6,781,668 to Schuster et al. ("Schuster et al."). Applicants respectfully traverse the rejection, without prejudice.

The body of this rejection refers to "Schuster et al." but the first paragraph of the rejection does not. Applicants have assumed that "Schuster et al." was intended to be included in the first paragraph and that the reference to "Schuster et al." is to U.S. Patent No. 6,781,668 cited by the Examiner in the last Office Action. If this understanding is incorrect

and unless this application is allowed, Applicants demand a further Office Action with a new time to respond so that the Applicants may properly respond.

Applicants respectfully submit that, as discussed above, Mizutani et al. fail to disclose, teach or suggest independent claims 21 and 30 and that Schuster et al. fail to overcome the shortcomings of Mizutani et al. In particular, Applicants submit that the teachings in Mizutani et al. do not render independent claim 21 obvious at least because Mizutani et al. fail to disclose, teach or suggest in any way an immersion liquid inlet port mechanically isolated from the projection system. Schuster et al. do not disclose anything about immersion lithography and so fail to overcome the shortcomings of Mizutani et al. Further, Applicants submit that Mizutani et al. do not render independent claim 30 obvious at least because Mizutani et al. fail to disclose, teach or suggest an immersion liquid outlet port radially outwardly, relative to an optical axis of the projection system, of an immersion liquid inlet port. Indeed, Applicants submit that such an outlet port would not properly work in the Mizutani et al. system since in that system liquid is provided on one side of the projection system and removed on the other side. A radially outward liquid outlet would defeat the supply of liquid under the projection system in the Mizutani et al. apparatus. Schuster et al. do not disclose anything about immersion lithography and so fail to overcome the shortcomings of Mizutani et al.

Claims 25 and 28-29 depend from claim 21 and claims 32 and 35-37 depend from claim 30 and are, therefore, patentable for at least the same reasons provided above related to respectively claims 21 and 30 and for the additional features recited therein.

Therefore, for at least the above reasons, Mizutani et al., Schuster et al., and any combination thereof, fail to disclose, teach or suggest all the features recited by claims 25, 28-29, 32 and 35-37. As a result, Applicants respectfully submit that the rejection under 35 U.S.C. §103 of claims 25, 28-29, 32 and 35-36 in view of Mizutani et al. and Schuster et al. should be withdrawn and the claims allowed.

The Office Action rejected claims 23 and 27 under 35 U.S.C. §103 as being obvious in view of Mizutani et al. further in view of U.S. Patent No. 6,788,477 to Lin ("Lin"). Applicants respectfully traverse the rejection, without prejudice.

Applicants respectfully submit that, as discussed above, Mizutani et al. fail to disclose, teach or suggest independent claims 21 and 30 and that Lin fails to overcome the shortcomings of Mizutani et al. In particular, Applicants submit that the teachings in Mizutani et al. do not render independent claim 21 obvious at least because Mizutani et al.

fail to disclose, teach or suggest in any way an immersion liquid inlet port mechanically isolated from the projection system. Similarly, Lin provides no disclosure, teaching or suggestion regarding an immersion liquid inlet port provided on a boundary of the space, not provided on the substrate table, and mechanically isolated from the projection system. For example, Lin only discloses a liquid inlet provided on the substrate table.

Therefore, for at least the above reasons, Mizutani et al., Lin, and any combination thereof, fail to disclose, teach or suggest all the features recited by claims 23 and 27. As a result, Applicants respectfully submit that the rejection under 35 U.S.C. §103 of claims 23 and 27 in view of Mizutani et al., Lin, and any combination thereof, should be withdrawn and the claims allowed.

Finally, Applicants appreciate the Examiner's indication that claims 1, 3-13 and 15-20 are allowed. In reply to the Examiner's statement of reasons for allowance of those claims, Applicants note that portions of the Examiner's comments paraphrase claim features and/or combine features from separate claims and thus do not accurately represent the actual claim language. Applicants respectfully submit that the claims should be deemed patentable for the actual claim language recited therein. Applicants also respectfully submit that patentability is based on the subject matter of the claims as a whole. That is, the patentability of the claims rests on the combination of recited elements and limitations. As such, Applicants respectfully submit that no one element or limitation in particular should be deemed to impart to or be required for patentability of the claims. Furthermore, Applicants respectfully submit that the independent claims are all separately patentable from each other and are patentable for the subject matter specifically recited as a whole in each of those claims. Applicants also submit that the dependent claims are allowable for their dependence on the allowed independent claims and further for the additional subject matter recited in each of those dependent claims.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance. If questions relating to patentability remain, the Examiner is invited to contact the undersigned to discuss them.

Should any fees be due, please charge them to our deposit account no. 03-3975, under our order no. 081468/0307331. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced deposit account.

Respectfully submitted,
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